



separated and inserted through one of the paths.

10. An untwisting device for the multiple-layer strands, characterized in that paths are formed in rotors substantially in an axial direction, wherein  
5 the rotors are coaxial, and wherein each filament of the strand is separated and inserted through one of the paths.

11. The untwisting device for the strand according to claim 9, characterized in that rotating  
10 means is provided to apply a rotational force to the rotor in the direction of twisting.

12. A manufacturing apparatus for the rubber membrane coated strand, characterized by:  
the untwisting device for strand according to  
15 any one of claims 9 to 11; and

rubber supplying means downstream of the strand with respect to the untwisting device, wherein the rubber supplying means applies the rubber membrane coating to the periphery of each untwisted filament.

20 13. A manufacturing apparatus for a rubber membrane coated strand, wherein the strand is formed by twisting filaments, characterized by:

rubber supplying means including a container for liquefied rubber;

25 guiding means for guiding the strand to run through the rubber supplying means; and

untwisting means for untwisting each filament so that the rubber membrane is coated all around each filament when the strand is guided through the rubber  
30 supplying means.

14. The manufacturing apparatus for the rubber membrane coated strand according to claim 13, characterized by twisting means for retwisting

untwisted filaments.

15. The manufacturing apparatus for the rubber membrane coated strand according to any one of claims 12 to 14, characterized by pretreatment means for performing pretreatment on the strand upstream of the rubber supplying means.

16. The manufacturing apparatus for the rubber membrane coated strand according to any one of claims 12 to 15, characterized by post-treatment means for performing post-treatment on the strand downstream of the rubber supplying means.

17. A manufacturing method for the rubber membrane coated strand, characterized in that the strand, which is formed by twisting filaments, is untwisted so that a predetermined space is formed between the filaments, wherein, in this state, the rubber membrane coating is applied to the periphery of each filament, and wherein the filaments are retwisted.

20            18. The manufacturing method for the rubber  
membrane coated strand according to claim 17,  
characterized in that the rubber membrane coating is  
applied to a group of strands so that the strands  
form a ribbon.

25            19. A manufacturing method for a belt,  
characterized in that the belt is manufactured using  
the ribbon-like rubber membrane coated strand  
manufactured by the manufacturing method according to  
claim 18.

30 20. A manufacturing method for a ply,  
characterized in that the ply is manufactured using  
the ribbon-like rubber membrane coated strand  
manufactured by the manufacturing method according to

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claim 18.

21. A manufacturing method for the ply according to claim 20, characterized in that a priming treatment is performed on the filaments before the rubber membrane is coated.

22. A manufacturing method for a tire, characterized in that the tire is manufactured using at least one of the belt manufactured by the manufacturing method according to claim 19 and the ply manufactured by the manufacturing method according to claims 20 or 21.

23. A manufacturing method for a tire, wherein a tire is manufactured using a rubber membrane coated strand, wherein the rubber membrane coated strand is manufactured by untwisting the strand, which is formed by twisting filaments, wherein a predetermined space is formed between the filaments, wherein the rubber membrane coating is applied to the periphery of each filament while the filaments are separated, and wherein, the filaments are retwisted.

24. The rubber membrane coated strand according to any one of claims 2 to 4, characterized in that the rubber membrane coated strand is formed by applying the rubber membrane coating to the strand, wherein the rubber membrane coated strand is aligned next to one another strand to form a ribbon.

25. The rubber membrane coated strand according to any one of claims 1 to 4 and 24, characterized in that each filament has a uniform cross-sectional shape and uniform characteristics.

*add 94*